

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,907	10/518,907 10/21/2005		Gerd Hoffman	08215-580US1	5392
26171	7590	09/27/2006	EXAMINER		
FISH & R P.O. BOX		OSON P.C.	FIGUEROA, FELIX O		
		N 55440-1022		ART UNIT	PAPER NUMBER
				2833	

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commence	10/518,907	HOFFMAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Felix O. Figueroa	2833				
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet wi	th the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perions for reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 1.136(a). In no event, however, may a ro od will apply and will expire SIX (6) MON ute, cause the application to become AB	CATION.  apply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on <u>03</u>	August 2006.					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ Th	a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.					
3) Since this application is in condition for allow	•	•				
closed in accordance with the practice under	r <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1 and 25-45</u> is/are pending in the a	pplication.					
4a) Of the above claim(s) is/are withdo	rawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1 and 25-45</u> is/are rejected.						
7) Claim(s) is/are objected to.	1/					
8) Claim(s) are subject to restriction and	l/or election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Exami	ner.					
10)☐ The drawing(s) filed on is/are: a)☐ a	ccepted or b) objected to	by the Examiner.				
Applicant may not request that any objection to the	ne drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the corre	·					
11) ☐ The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreigna) All b) Some * c) None of:	gn priority under 35 U.S.C. §	119(a)-(d) or (f).				
1. ☐ Certified copies of the priority docume	ents have been received.					
Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the pr	riority documents have been	received in this National Stage				
application from the International Bure	eau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a li	st of the certified copies not	received.				
Attachment(s)						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)		tummary (PTO-413) s)/Mail Date				
3) Information Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of Ir	nformal Patent Application				
Paper No(s)/Mail Date	6)	<del>_</del> ·				

Art Unit: 2833

### **DETAILED ACTION**

## Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure. It should avoid using phrases which can be implied, such as, "This document relates to," "The disclosure defined by this invention," "The disclosure describes," etc. The phrase "This document relates to" should be deleted from the abstract.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 25-40 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Embo (US 6,019,627) in view of Heng et al. (US 5,257,945).

Embo discloses a branching device for at least one electric line, the branching device comprising: a housing (3); and at least one electrically conducting wire terminal (9,4) that provides a branching contact, is accommodated in a holder (16) and includes contact lips, with cutting edges (at 11) for cutting through the insulation of the wire to be connected to the wire terminal; wherein: the at least one wire terminal further includes at least one connecting lug (4), a through-channel for the uninterrupted passage of the wire, and at least one holding-down clamp (13,5) which holds the wires in the through-channel of the wire terminals; at least one of the contact lips is flexible in a direction

pointing away from the through-channel; and the holding-down clamp exhibits a transverse plate that closes off the through-channel and has an opening (not labeled) through which the connecting lug of the wire terminal protrudes.

Page 3

Embo discloses substantially the claimed invention except for the contact lips being located diagonally to the through-channel. Heng teaches a terminal having contact lips located diagonally to the through-channel so that the tip of the edge of the contact lip protrudes into the through-channel (see Fig.4); at least one of the contact lips being flexible in a direction pointing away from the through-channel, thus preventing slipping of the wire when the wire is pulled/pushed. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the terminal of Embo, as taught by Heng, to prevent slipping of the wire when the wire is pulled/pushed.

Regarding claim 25, Heng discloses the wire terminal exhibiting a generally octagonal outline with two opposing longer sides, two shorter sides orthogonal to the longer sides, and diagonal sides situated between the longer and shorter sides, and wherein the at least one holder includes a corresponding octagonal locating space for accommodating the wire terminal.

Regarding claim 26, Heng discloses the contact lips being generally aligned with the diagonal sides of the wire terminal.

Regarding claim 27, Embo, as modified by Heng, discloses the through-channel running in a straight line through the wire terminal.

Regarding claim 28, Embo, as modified by Heng, discloses the wire terminal being accommodated releasably in the holder.

Regarding claim 29, Embo, as modified by Heng, discloses the device including a number of wire terminals corresponding to at least a number of wires to be branched.

Regarding claim 30, Embo, as modified by Heng, discloses the contact lips being provided in pairs in each case on a wire terminal.

Regarding claim 31, Embo, as modified by Heng, discloses the spacing between two paired contact lips is less than or equal to the diameter of a wire to be connected to the wire terminal.

Regarding claim 32, Embo, as modified by Heng, discloses the edges of paired contact lips facing the through-channel running parallel to one another at least in sections.

Regarding claim 33, Embo, as modified by Heng, discloses two paired contact lips together form an entry section for the wire, with a spacing between the contact lips widening towards an entry side of the through-channel.

Regarding claim 34, Embo, as modified by Heng, discloses a notch being provided between the wire terminal and its holder.

Regarding claim 35, Embo, as modified by Heng, discloses the holder of the wire terminals being attached releasably to the housing.

Regarding claim 36, Embo, as modified by Heng, discloses multiple wire terminals and a common holder for all of the wire terminals.

Art Unit: 2833

Regarding claim 37, Embo, as modified by Heng, discloses a one common holding-down clamp for all wires.

Regarding claim 38, Embo, as modified by Heng, discloses the holding-down clamp representing a closure of the openings formed between the contact lips.

Regarding claim 39, Embo, as modified by Heng, discloses the holding-down clamp can be latched to the holder of the wire terminal.

Regarding claim 40, Embo, as modified by Heng, discloses the holding-down clamp can be latched to the housing.

Regarding claim 43, Embo, as modified by Heng, discloses the housing being assembled from a housing base section and a housing upper section.

Regarding claim 44, Embo, as modified by Heng, discloses the housing base section and the housing upper section can be screwed together (by 19,20).

Regarding claim 45, Embo, as modified by Heng, discloses a strain relief (24) being provided on the housing at the outlets for the lines.

Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Embo and Heng, as applied to claim 1, and further in view of Toly (US 6,071,145).

Embo, as modified by Heng, discloses substantially the claimed invention except for the use of seals. Toly teaches the use of sealing rings (49) at the outlets of the line to protect the interior connections from dust and moisture. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use sealing rings on the outlets, as taught by Toly, to protect the interior connections from dust and moisture.

## Response to Arguments

Applicant's arguments filed 08/03/2006 have been fully considered but they are not persuasive.

In response to Applicant's argument that the combination of Embo, Heng and Toly fails to discloses "at least one holding-down clamp which holds the wires in the through-channel of the wires terminals" and which "exhibits a transverse plate that closes of the through channel and has an opening through which the connecting lug of the wire terminal protrudes", please note that Embo discloses at least one holding-down clamp (defined by 13 and 5) which holds the wires in the through-channel (at 10) of the wires terminals (each defined by 9 and 4) and which exhibits a transverse plate (not shown, underside of Figure 1) that closes of the through-channel (from the exterior) and has an opening through which the connecting lug (4) of the wire terminal protrudes.

In response to Applicant's argument that "element 5 [of Embo] is simply a plug body that holds conductors and plug contacts" and that "element 13 correspond to guides for controlling where the conductors come to rest", please note that elements 5 and 13 define a unit that forms a holding-down clamp with respect to the housing 3.

Additionally, Embo discloses a transverse plate (not shown, underside of Figure 1) that closes of the through channel from the exterior.

In response to Applicant's argument regarding "the contact lips", please note that contrary to Applicant's assertions that 1) "the Office action relies on elements 13 and 5... as disclosing... the contact lips", and 2) that the holder (16) has the contact lips, the contact lips are part of the wire terminals (each defined by 9 and 4) and are shown in

Figure 3 at 11. The contact lips (at 11) are similar to the contact lips 46 of the present application, as claimed.

### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/518,907 Page 8

Art Unit: 2833

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jely U.J.A. Felix O. Figueroa

Art Unit 2833